SEQUENCE LISTING

<110> Nordlund, Henri Rainer et al.

<120> Avidin mutants

<130> BP110588

<160> 29

<170> PatentIn version 3.1

<210> 1
<211> 152
<212> PRT
<213> Gallus gallus

<400> 1

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Ala Leu Val Ala Pro Gly Leu Ser Ala Arg Lys Cys Ser Leu Thr Gly
20 25 30

Lys Trp Thr Asn Asp Leu Gly Ser Asn Met Thr Ile Gly Ala Val Asn
35 40 45

Ser Arg Gly Glu Phe Thr Gly Thr Tyr Ile Thr Ala Val Thr Ala Thr
50 55 60

Ser Asn Glu Ile Lys Glu Ser Pro Leu His Gly Thr Gln Asn Thr Ile
65 70 75 80

Asn Lys Arg Thr Gln Pro Thr Phe Gly Phe Thr Val Asn Trp Lys Phe
85 90 95

Ser Glu Ser Thr Thr Val Phe Thr Gly Gln Cys Phe Ile Asp Arg Asn
100 105 110

Gly Lys Glu Val Leu Lys Thr Met Trp Leu Leu Arg Ser Ser Val Asn
115 120 125

Asp Ile Gly Asp Asp Trp Lys Ala Thr Arg Val Gly Ile Asn Ile Phe
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Thr Arg Leu Arg Thr Gln Lys Glu
145 150

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<212> PRT
<213> Gallus gallus

<400> 2

Met Val His Ala Thr Ser Pro Leu Leu Leu Leu Leu Leu Leu Ser Leu
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Ala Leu Val Ala Pro Gly Leu Ser Ala Arg Lys Arg Thr Gln Pro Thr
20 25 30

Phe Gly Phe Thr Val Asn Trp Lys Phe Ser Glu Ser Thr Thr Val Phe
35 40 45

Thr Gly Gln Cys Phe Ile Asp Arg Asn Gly Lys Glu Val Leu Lys Thr
50 55 60

Met Trp Leu Leu Arg Ser Ser Val Asn Asp Ile Gly Asp Asp Trp Lys
65 70 75 80

Ala Thr Arg Val Gly Ile Asn Ile Phe Thr Arg Leu Arg Thr Gln Lys
85 90 95

Glu Gly Gly Ser Gly Gly Ser Ala Arg Lys Cys Ser Leu Thr Gly Lys
100 105 110

Trp Thr Asn Asp Leu Gly Ser Asn Met Thr Ile Gly Ala Val Asn Ser
115 120 125

Arg Gly Glu Phe Thr Gly Thr Tyr Ile Thr Ala Val Thr Ala Thr Ser
130 135 140

Asn Glu Ile Lys Glu Ser Pro Leu His Gly Thr Gln Asn Thr Ile Asn
145 150 155 160

Lys Ser Gly Gly Ser Thr Thr Val Phe Thr Gly Gln Cys Phe Ile Asp
165 170 175

Arg Asn Gly Lys Glu Val Leu Lys Thr Met Trp Leu Leu Arg Ser Ser
180 185 190

Val Asn Asp Ile Gly Asp Asp Trp Lys Ala Thr Arg Val Gly Ile Asn
195 200 205

Ile Phe Thr Arg Leu Arg Thr Gln Lys Glu Gly Gly Ser Gly Gly Ser
210 215 220

Ala Arg Lys Cys Ser Leu Thr Gly Lys Trp Thr Asn Asp Leu Gly Ser
225 230 235 240

Asn Met Thr Ile Gly Ala Val Asn Ser Arg Gly Glu Phe Thr Gly Thr
245 250 255

Tyr Ile Thr Ala Val Thr Ala Thr Ser Asn Glu Ile Lys Glu Ser Pro
260 265 270

Leu His Gly Thr Gln Asn Thr Ile Asn Lys Arg Thr Gln Pro Thr Phe
275 280 285

Gly Phe Thr Val Asn Trp Lys Phe Ser Glu
290 295

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<400> 3

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<223> primer

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cctggcagag aggccggga 19

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aagaggaccc agcccacctt 20

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ccggcggatc caccactgtc ttcacgggc 29

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cggctgtgat gtgggtgcct gtg 23

<210> 18
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<400> 19
gacagtggta gatccgcc 18

<210> 20
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<210> 24
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<213> Gallus gallus

<400> 24

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Phe Gly Phe Thr Val Asn Trp Lys Phe Ser Glu Ser Thr Thr Val Phe
        35                  40                  45

Thr Gly Gln Cys Phe Ile Asp Arg Asn Gly Lys Glu Val Leu Lys Thr
    50                  55                  60

Met Trp Leu Leu Arg Ser Ser Val Asn Asp Ile Gly Asp Asp Trp Lys
65                  70                  75                  80

Ala Thr Arg Val Gly Ile Asn Ile Phe Thr Arg Leu Arg Thr Gln Lys
                85                  90                  95

Glu Gly Gly Ser Gly Gly Ser Ala Arg Lys Cys Ser Leu Thr Gly Lys
            100                 105                 110

Trp Thr Asn Asp Leu Gly Ser Asn Met Thr Ile Gly Ala Val Asn Ser
        115                 120                 125

Arg Gly Glu Phe Thr Gly Thr Tyr Ile Thr Ala Val Thr Ala Thr Ser
    130                 135                 140

Asn Glu Ile Lys Glu Ser Pro Leu His Gly Thr Gln Asn Thr Ile Asn
145                 150                 155                 160

Lys Ser Gly Gly Ser Thr Thr Val Phe Thr Gly Gln Cys Phe Ile Asp
                165                 170                 175

Arg Asn Gly Lys Glu Val Leu Lys Thr Met Trp Leu Leu Arg Ser Ser
            180                 185                 190

Val Asn Asp Ile Gly Asp Asp Trp Lys Ala Thr Arg Val Gly Ile Asn
        195                 200                 205

Ile Phe Thr Arg Leu Arg Thr Gln Lys Glu Gly Gly Ser Gly Gly Ser
    210                 215                 220

Ala Arg Lys Cys Ser Leu Thr Gly Lys Trp Thr Asn Asp Leu Gly Ser
225                 230                 235                 240

Asn Met Thr Ile Gly Ala Val Asn Ser Arg Gly Glu Phe Thr Gly Thr
                245                 250                 255

Tyr Ile Thr Ala Val Thr Ala Thr Ser Asn Glu Ile Lys Glu Ser Pro
            260                 265                 270
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Leu His Gly Thr Gln Asn Thr Ile Asn Lys Arg Thr Gln Pro Thr Phe
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Gly Phe Thr Val Asn Trp Lys Phe Ser Glu Gly Gly Ser Gly Ser Gly
    290                 295                 300

Ser Gly Ser Gly Ser Gly Arg Thr Gln Pro Thr Phe Gly Phe Thr Val
305                 310                 315                 320

Asn Trp Lys Phe Ser Glu Ser Thr Thr Val Phe Thr Gly Gln Cys Phe
                325                 330                 335

Ile Asp Arg Asn Gly Lys Glu Val Leu Lys Thr Met Trp Leu Leu Arg
            340                 345                 350

Ser Ser Val Asn Asp Ile Gly Asp Asp Trp Lys Ala Thr Arg Val Gly
        355                 360                 365

Ile Asn Ile Phe Thr Arg Leu Arg Thr Gln Lys Glu Gly Gly Ser Gly
    370                 375                 380

Gly Ser Ala Arg Lys Cys Ser Leu Thr Gly Lys Trp Thr Asn Asp Leu
385                 390                 395                 400

Gly Ser Asn Met Thr Ile Gly Ala Val Asn Ser Arg Gly Glu Phe Thr
                405                 410                 415

Gly Thr Tyr Ile Thr Ala Val Thr Ala Thr Ser Asn Glu Ile Lys Glu
            420                 425                 430

Ser Pro Leu His Gly Thr Gln Asn Thr Ile Asn Lys Ser Gly Gly Ser
        435                 440                 445

Thr Thr Val Phe Thr Gly Gln Cys Phe Ile Asp Arg Asn Gly Lys Glu
    450                 455                 460

Val Leu Lys Thr Met Trp Leu Leu Arg Ser Ser Val Asn Asp Ile Gly
465                 470                 475                 480

Asp Asp Trp Lys Ala Thr Arg Val Gly Ile Asn Ile Phe Thr Arg Leu
                485                 490                 495

Arg Thr Gln Lys Glu Gly Gly Ser Gly Gly Ser Ala Arg Lys Cys Ser
            500                 505                 510
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Leu Thr Gly Lys Trp Thr Asn Asp Leu Gly Ser Asn Met Thr Ile Gly
515 520 525

Ala Val Asn Ser Arg Gly Glu Phe Thr Gly Thr Tyr Ile Thr Ala Val
530 535 540

Thr Ala Thr Ser Asn Glu Ile Lys Glu Ser Pro Leu His Gly Thr Gln
545 550 555 560

Asn Thr Ile Asn Lys Arg Thr Gln Pro Thr Phe Gly Phe Thr Val Asn
565 570 575

Trp Lys Phe Ser Glu
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<210> 25
<211> 1746
<212> DNA
<213> Gallus gallus
<221> DNA
<223> DNA sequence which codes for scAvd of SEQ ID NO 24

<400> 25
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cccggcctct ctgccaggaa gaggacccag cccacctttg gcttcaccgt caattggaag 120

ttttcagagt ccaccactgt cttcacgggc cagtgcttca tagacaggaa tgggaaggag 180

gtcctgaaga ccatgtggct gctgcggtca agtgttaatg acattggtga tgactggaaa 240

gctaccaggg tcggcatcaa catcttcact cgcctgcgca cacagaagga gggaggctcc 300

ggaggctccg ccagaaagtg ctcgctgact gggaaatgga ccaacgatct gggctccaac 360

atgaccatcg gggctgtgaa cagcagaggt gaattcacag gcacctacat cacagccgta 420

acagccacat caaatgagat caaagagtca ccactgcatg ggacacaaaa caccatcaac 480

aagtccggcg gatccaccac tgtcttcacg ggccagtgct tcatagacag gaatgggaag 540

gaggtcctga agaccatgtg gctgctgcgg tcaagtgtta atgacattgg tgatgactgg 600

aaagctacca gggtcggcat caacatcttc actcgcctgc gcacacagaa ggagggaggc 660

tccggaggct ccgccagaaa gtgctcgctg actgggaaat ggaccaacga tctgggctcc 720

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aattggaagt tttcagagtc caccactgtc ttcacgggcc agtgcttcat agacaggaat 1020

gggaaggagg tcctgaagac catgtggctg ctgcggtcaa gtgttaatga cattggtgat 1080

gactggaaag ctaccagggt cggcatcaac atcttcactc gcctgcgcac acagaaggag 1140

ggaggctccg gaggctccgc cagaaagtgc tcgctgactg ggaaatggac caacgatctg 1200

ggctccaaca tgaccatcgg ggctgtgaac agcagaggtg aattcacagg cacctacatc 1260

acagccgtaa cagccacatc aaatgagatc aaagagtcac cactgcatgg gacacaaaac 1320

accatcaaca agtccggcgg atccaccact gtcttcacgg gccagtgctt catagacagg 1380

aatgggaagg aggtcctgaa gaccatgtgg ctgctgcggt caagtgttaa tgacattggt 1440

gatgactgga aagctaccag ggtcggcatc aacatcttca ctcgcctgcg cacacagaag 1500

gagggaggct ccggaggctc cgccagaaag tgctcgctga ctgggaaatg gaccaacgat 1560

ctgggctcca acatgaccat cggggctgtg aacagcagag gtgaattcac aggcacctac 1620

atcacagccg taacagccac atcaaatgag atcaaagagt caccactgca tgggacacaa 1680

aacaccatca acaagaggac ccagcccacc tttggcttca ccgtcaattg gaagttttca 1740

gagtga 1746

<210> 26
<211> 897
<212> DNA
<213> Gallus gallus
<221> DNA
<223> DNA sequence which codes for dcAvd of SEQ ID 2

<400> 26
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cccggcctct ctgccaggaa gaggacccag cccacctttg gcttcaccgt caattggaag 120

ttttcagagt ccaccactgt cttcacgggc cagtgcttca tagacaggaa tgggaaggag 180

gtcctgaaga ccatgtggct gctgcggtca agtgttaatg acattggtga tgactggaaa 240

gctaccaggg tcggcatcaa catcttcact cgcctgcgca cacagaagga gggaggctcc 300

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aagtccggcg gatccaccac tgtcttcacg ggccagtgct tcatagacag gaatgggaag 540

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aacatgacca tcggggctgt gaacagcaga ggtgaattca caggcaccta catcacagcc 780

gtaacagcca catcaaatga gatcaaagag tcaccactgc atgggacaca aaacaccatc 840

aacaagagga cccagcccac ctttggcttc accgtcaatt ggaagttttc agagtga 897

<210> 27
<211> 31
<212> DNA
<213> Artificial sequence
<223> primer cp34_C1

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<210> 28
<211> 290
<212> PRT
<213> Gallus gallus

<400> 28

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20 25 30

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35 40 45

Cys Phe Ile Asp Arg Asn Gly Lys Glu Val Leu Lys Thr Met Trp Leu
50 55 60

Leu Arg Ser Ser Val Asn Asp Ile Gly Asp Asp Trp Lys Ala Thr Arg
65 70 75 80

Val Gly Ile Asn Ile Phe Thr Arg Leu Arg Thr Gln Lys Glu Gly Gly
85 90 95

Ser Gly Gly Ser Ala Arg Lys Cys Ser Leu Thr Gly Lys Trp Thr Asn
100 105 110

Asp Leu Gly Ser Asn Met Thr Ile Gly Ala Val Asn Ser Arg Gly Glu
115 120 125

Phe Thr Gly Thr Tyr Ile Thr Ala Val Thr Ala Thr Ser Asn Glu Ile

130 135 140

Lys Glu Ser Pro Leu His Gly Thr Gln Asn Thr Ile Asn Lys Ser Gly
145 150 155 160

Gly Ser Lys Glu Ser Pro Leu His Gly Thr Gln Asn Thr Ile Asn Lys
165 170 175

Arg Thr Gln Pro Thr Phe Gly Phe Thr Val Asn Trp Lys Phe Ser Glu
180 185 190

Ser Thr Thr Val Phe Thr Gly Gln Cys Phe Ile Asp Arg Asn Gly Lys
195 200 205

Glu Val Leu Lys Thr Met Trp Leu Leu Arg Ser Ser Val Asn Asp Ile
210 215 220

Gly Asp Asp Trp Lys Ala Thr Arg Val Gly Ile Asn Ile Phe Thr Arg
225 230 235 240

Leu Arg Thr Gln Lys Glu Gly Gly Ser Gly Gly Ser Ala Arg Lys Cys
245 250 255

Ser Leu Thr Gly Lys Trp Thr Asn Asp Leu Gly Ser Asn Met Thr Ile
260 265 270

Gly Ala Val Asn Ser Arg Gly Glu Phe Thr Gly Thr Tyr Ile Thr Ala
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Val Thr
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<213> Gallus gallus

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tccaccactg tcttcacggg ccagtgcttc atagacagga atgggaagga ggtcctgaag 180

accatgtggc tgctgcggtc aagtgttaat gacattggtg atgactggaa agctaccagg 240

gtcggcatca acatcttcac tcgcctgcgc acacagaagg agggaggctc cggaggctcc 300

gccagaaagt gctcgctgac tgggaaatgg accaacgatc tgggctccaa catgaccatc 360

ggggctgtga acagcagagg tgaattcaca ggcacctaca tcacagccgt aacagccaca 420

tcaaatgaga tcaaagagtc accactgcat gggacacaaa acaccatcaa caagtccggc 480

ggatccaaag agtcaccact gcatgggaca caaaacacca tcaacaagag gacccagccc 540

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